



1150144 - R8 SDMS

February 26, 2007

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for January 2007 activities - Hecla Mining Company Apex Site (EPA
ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the January 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)



February 26, 2007

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, Utah 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for December 2006 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the December 2006 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", with a long horizontal flourish extending to the right.

Paul L. Glader
Manager Environmental Services

End

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)



February 26, 2007

MEMORANDUM TO: Apex File
COPIES TO: distribution
FROM: Paul Glader
SUBJECT: **Progress Report No. 33 for period ending January 31, 2007; Pond 2 Final Closure - Apex Site, Washington County, Utah**

Summary

The 13th visual inspection, per the long term monitoring plan, was conducted on January 13. No unusual conditions were noted.

The settlement monuments were surveyed December 29 - no appreciable settlement has been noted. See attached September and December survey data, Alpha Engineering Company.

Discussion

1. Surface Monitor Results To Date – Since monitoring of the top surface began (Jan 4, 2006), there has been no appreciable movement in the surface monuments at the Apex site. See attached MEI Surface Monument Survey Data Review dated February 20, 2007.

Work Planned for Next Period

1. Visual inspection of site.
2. Settlement monument survey – quarterly basis – next survey in March.

Sampling and Analysis in Period

Field Tests, Inspections & QA/QC

1. The 13th post closure site inspection was done on January 20; a copy of the inspection report is included in the Supplemental Attachments section.
2. See attached MEI Surface Monument Survey Data Review dated February 20, 2007.

Cost and Schedule

Committed costs in January 2007 were \$177. Total project to date committed is approximately \$1,242,000. The cost report for January is attached.

Current status of the deliverables listed in the RCRA 7003 order is as follows:

Deliverable	Reference Paragraph	Due	Remarks
Post warning signage around perimeter of site	57	15 days after effective date of order	Work completed on March 9, 2004
Begin implementation of closure plan	63	45 days after receipt of filing of order	Work started on February 23, 2004
Monthly progress reports	64	28 th day after close of month	Requirement in effect after order is filed.
Completion report	66	30 days after completion of all closure plan tasks	Construction completion report submitted on 3/13/2006. A follow-up report to be issued after end of monitoring period.

The update of the schedule milestones is on the following table:

Milestone	Target	Actual	Remarks
Issue bid package -- Phase I (Sump Drains)	6/14/04	6/15/04	Portion of RFP materials issued at pre-bid on 6/14/04; remainder sent via courier
Issue RFP package -- Phase III	6/24/04	6/24/04	
Award contract for Phase I	6/24/04	6/29/04	Date contract was shipped to Hughes
Pre-bid meeting -- Phase III	7/19/04	7/19/04	
Start Phase I (Sump Drains) construction	7/12/04	7/19/04	
Start Phase II (Evaporation)	7/19/04	7/29/04	
Receive bids for Phase III	8/2/04	8/2/04	
Re-bid Phase III contract package	April 2005	4/27/05	Date bid package was sent to Hughes
Start Phase III construction	End of August 2005	8/29/05	Start of contractor mobilization
Complete Phase III construction	Dec 23rd 2005	12/23/05	Completion of contract scope of work
Issue Construction Completion Report	Week of 3/13/2006	3/13/06	

Supplemental Attachments

1. January 13, 2007 long term monitoring inspection report, by D. Truman.
2. February 20, 2007 Surface Monument Survey Data Review, by D. Gibbs, MEI.
3. September 21, 2006 and December 29, 2006 Monument Monitoring, Alpha Engineering Company.
4. January Cost Report

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>1-13-07</u>			
Inspector: <u>D. Turner</u>			
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues	NA	NA
Cover System (outslopes, top, rock)	Subsidence	Minor: ponding < 1" some gulying / erosion	Yes <u>X</u> * No <u> </u>
		Significant: see Table 2	Yes <u> </u> * No <u>X</u>
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes <u> </u> * No <u>X</u>
	Gulying	on top	depth > 1" Yes <u> </u> * No <u>X</u>
		at embankment crest or on outslope	depth > 2" Yes <u> </u> * No <u>X</u>
		w/in normal flow channel in diversion channel	no gulying allowed Yes <u> </u> * No <u>X</u>
		w/in diversions at toe of impoundment outslope	no gulying allowed Yes <u> </u> * No <u>X</u>
		in diversion channel at any other location	NA
	Erosion Protection Stability	rock subsidng or missing	Yes <u> </u> * No <u>X</u>
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes <u> </u> * No <u>X</u>
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <u>X</u> * No <u> </u>
	Diversion Swales	rock in place, no silting in or head cutting	Yes <u>X</u> * No <u> </u>
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes <u>X</u> * No <u> </u>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date: <u>1-13-07</u>	
Inspector: <u>D. J. Turner</u>	
Visible Outlying Areas	
Observed Condition:	<u>No Visible Signs of Concern</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>All fences look good</u>
Observed Damage:	<u>None</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No change from last month</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>1-13-07</u> Inspector: <u>[Signature]</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Gully Development: <u>minor</u> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Observable Leachate (colored): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>Some minor gully development</u>			
Potential Corrective Actions: <u>None</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width): Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Erosion / Gullying: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions:			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Rock Subsiding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Missing Rock: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions:			

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>1-13-07</u>			
Inspector: <u>TRM</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions:			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silting In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions:			

* Mark all areas of concern or requiring repairs on attached site map.



MEMORANDUM

TO: Paul Glader (Hedra Mining Company)
 FROM: Doug Gibbs (Monster Engineering Inc.)
 DATE: 2/20/07
 SUBJECT: Surface Monument Survey Data Review – Apex Site

A full year of surface monument surveying (January to December 2006) has been completed by Alpha Engineering at the Apex Site. Based on collected data, the elevation of the reclaimed impoundment top surface has in general decreased very slightly at most locations. Data for the year was corrected based on maintaining a zero elevation change at Monument #10 (at the gate). This monument (#10) is the baseline from which all other monuments are surveyed, is located outside of the impoundment, and should show no movement between monitoring periods.

Total survey monument elevation changes since installation are shown in the following table.

Monument	Total Elevation Change January 4 to December 29, 2006	
	(feet)	(inches)
1	-0.08	-0.96
2	-0.04	-0.48
3	-0.10	-1.2
4	-0.02	-0.24
5	-0.02	-0.24
6	-0.03	-0.36
7	-0.16	-1.9
8	-0.04	-0.48
9	-0.07	-0.84
10 (baseline @ gate)	NA	NA
11 / Main (@ impoundment center)	-0.03	-0.36
Average	-0.06	-0.72

NA – baseline corrected to show no movement

To date it appears that most period to period apparent movement can be attributed to surveying accuracy limitations as this data shows individual monuments both increasing and decreasing in elevation. However, when data for all monuments is "corrected" by keeping the baseline monument's (#10) elevation change to zero, then a general trend in decreasing elevations in all the other monuments becomes apparent, especially with monuments #1, #3, #7, and #9.

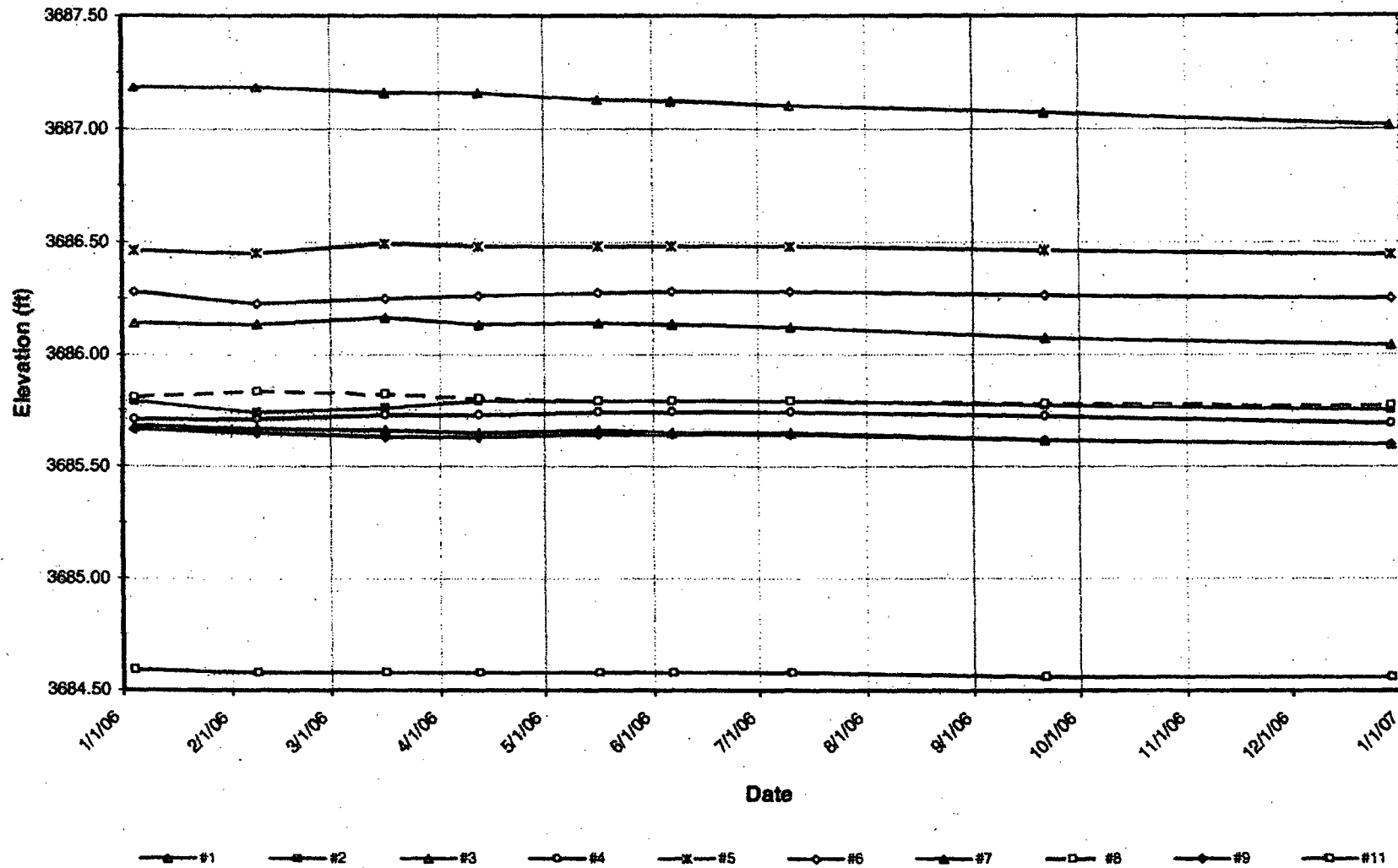
The elevation at Monument #7 (near the impoundment center) decreased the most (1.9 inches) during 2006. Interestingly, the elevation at monument #11, which is the nearest monument to #7, and is also located near the center, decreased a total of only 0.36 inches over that same time period. Slightly greater settlement in and nearer the center of the impoundment is to be expected as significant quantities of fill were placed in this area during construction.

Elevations at Monuments #4 and #5 on the southwest side of the impoundment have decreased the least (0.24 inches). The average decrease in elevation for all 10 monuments is 0.72 inches.

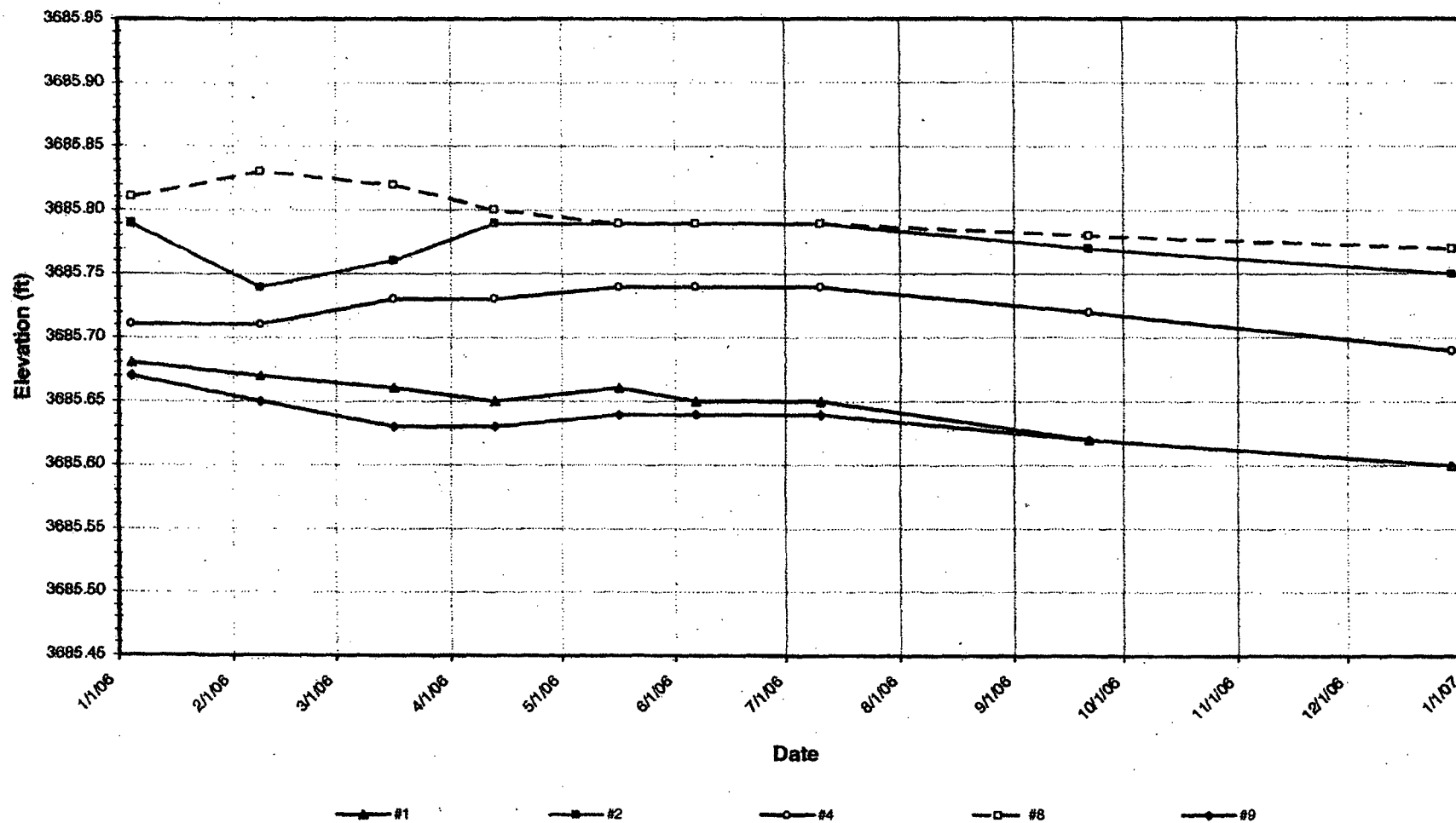
All elevation data provided by Alpha Engineering is presented graphically on the following pages. The first graph shows all monuments (except #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded and equivalent "Y" axes scales in order to more clearly show elevation changes and for ease of comparison between graphs. Based on a review of the graphs it appears that the rate of elevation change for all monuments is consistent. A monument location map (provided by Alpha Engineering) is attached on the last page of this document.

Based on data collected to date, MEI recommends that Hecla continue with their current plan and collect elevation data quarterly. Please call or email me if you have any questions concerning this review.

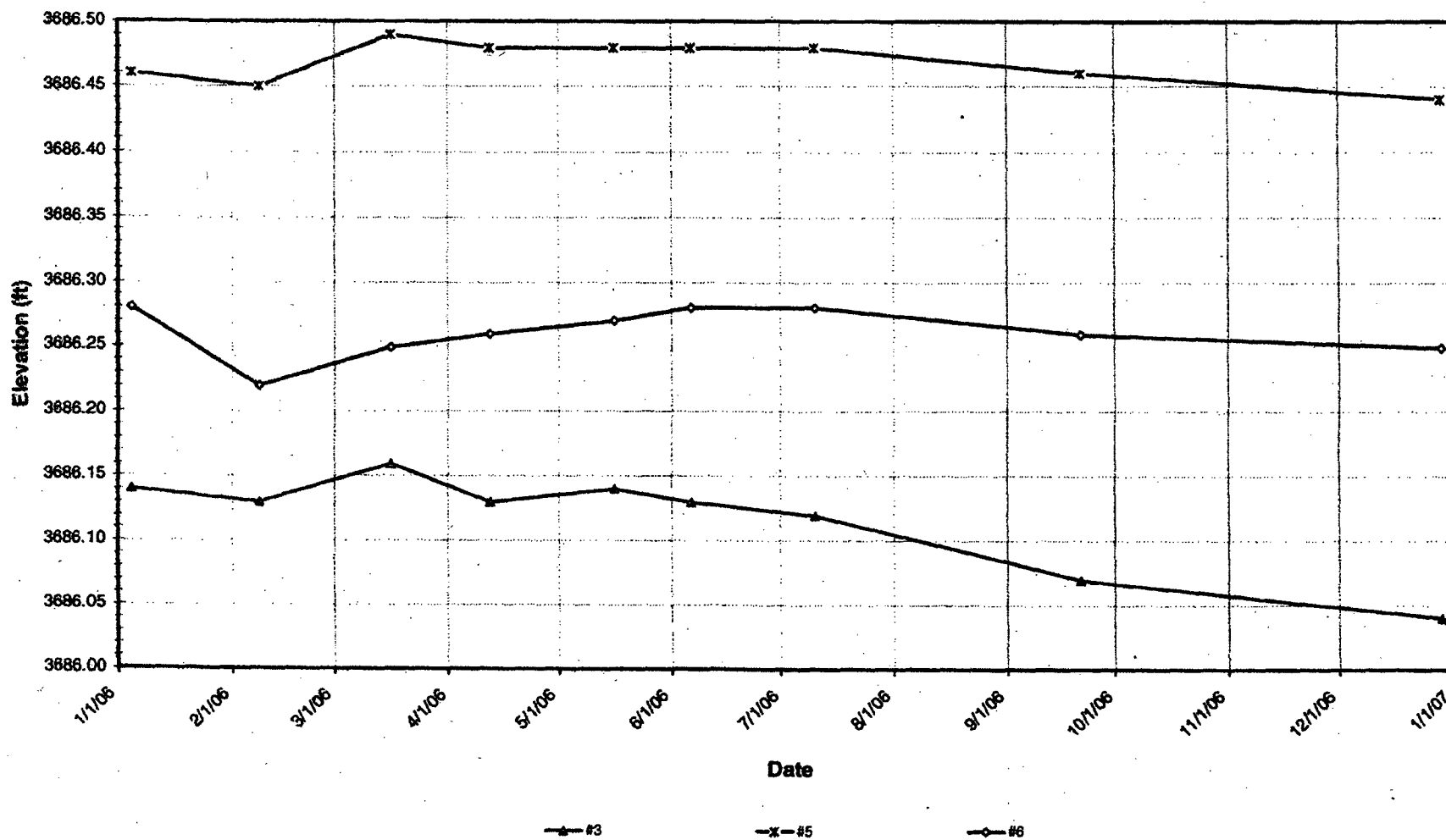
Apex Pond 2 - Settlement Monument Elevations



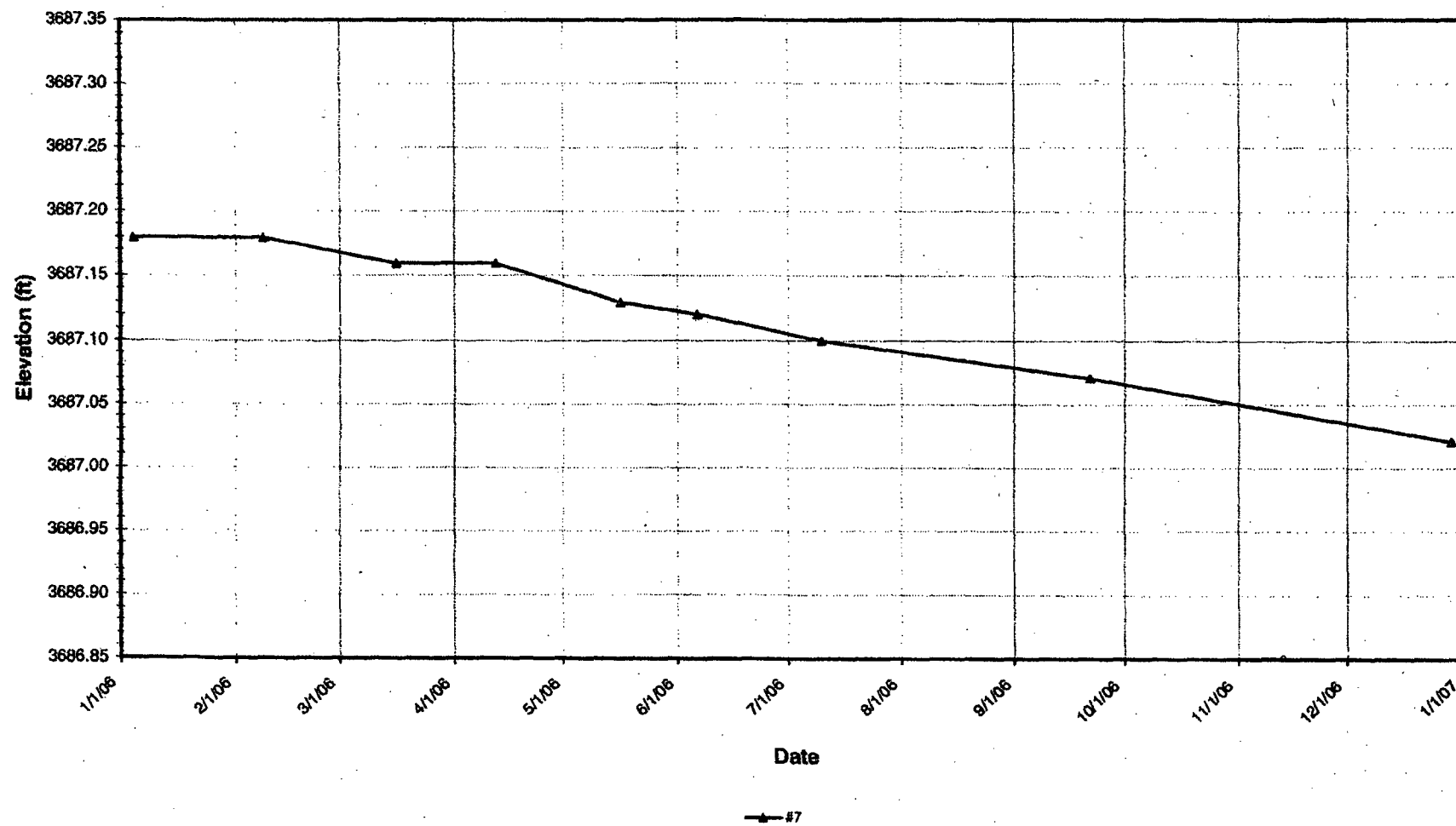
Apex Pond 2 - Settlement Monument Elevations



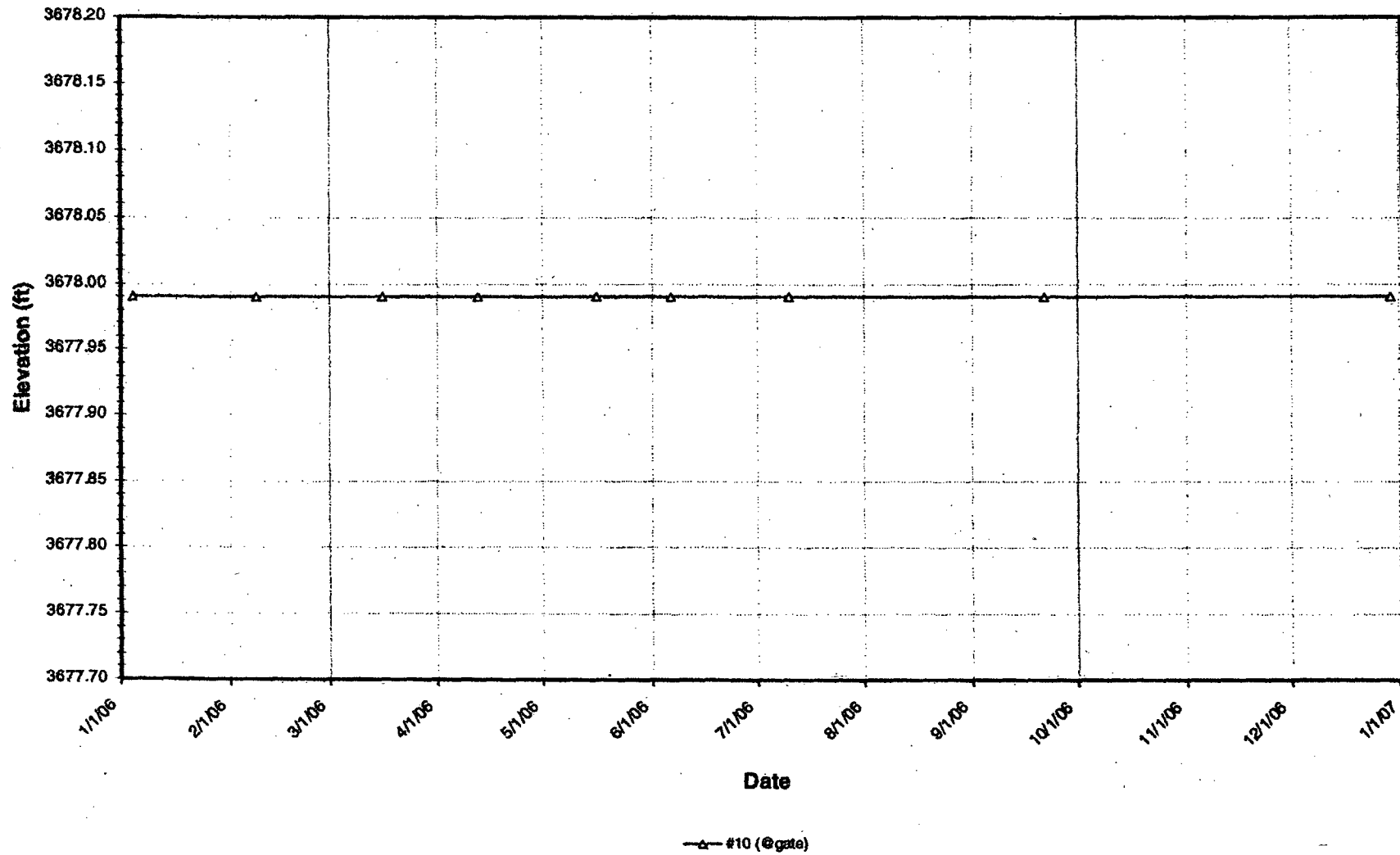
Apex Pond 2 - Settlement Monument Elevations



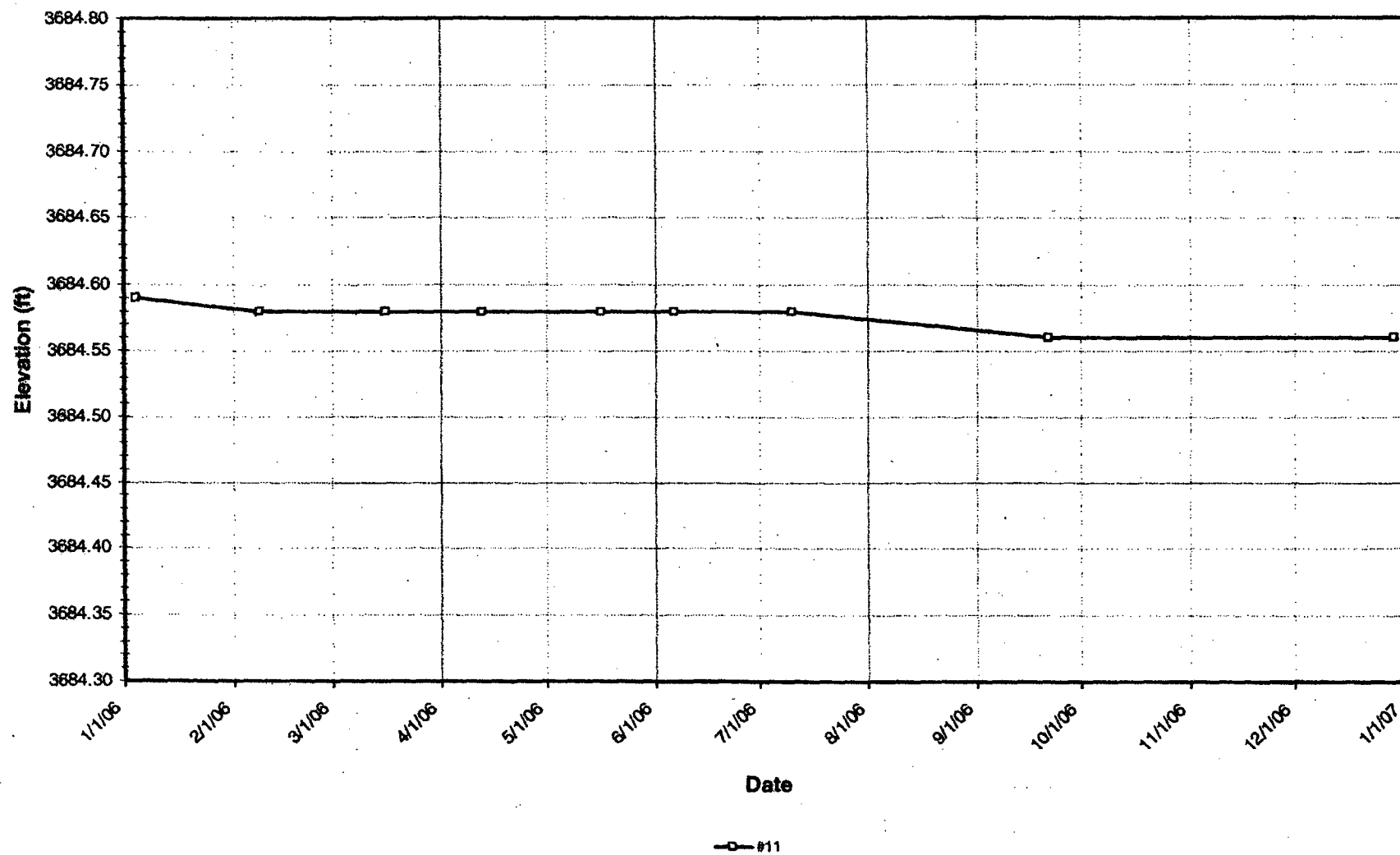
Apex Pond 2 - Settlement Monument Elevations

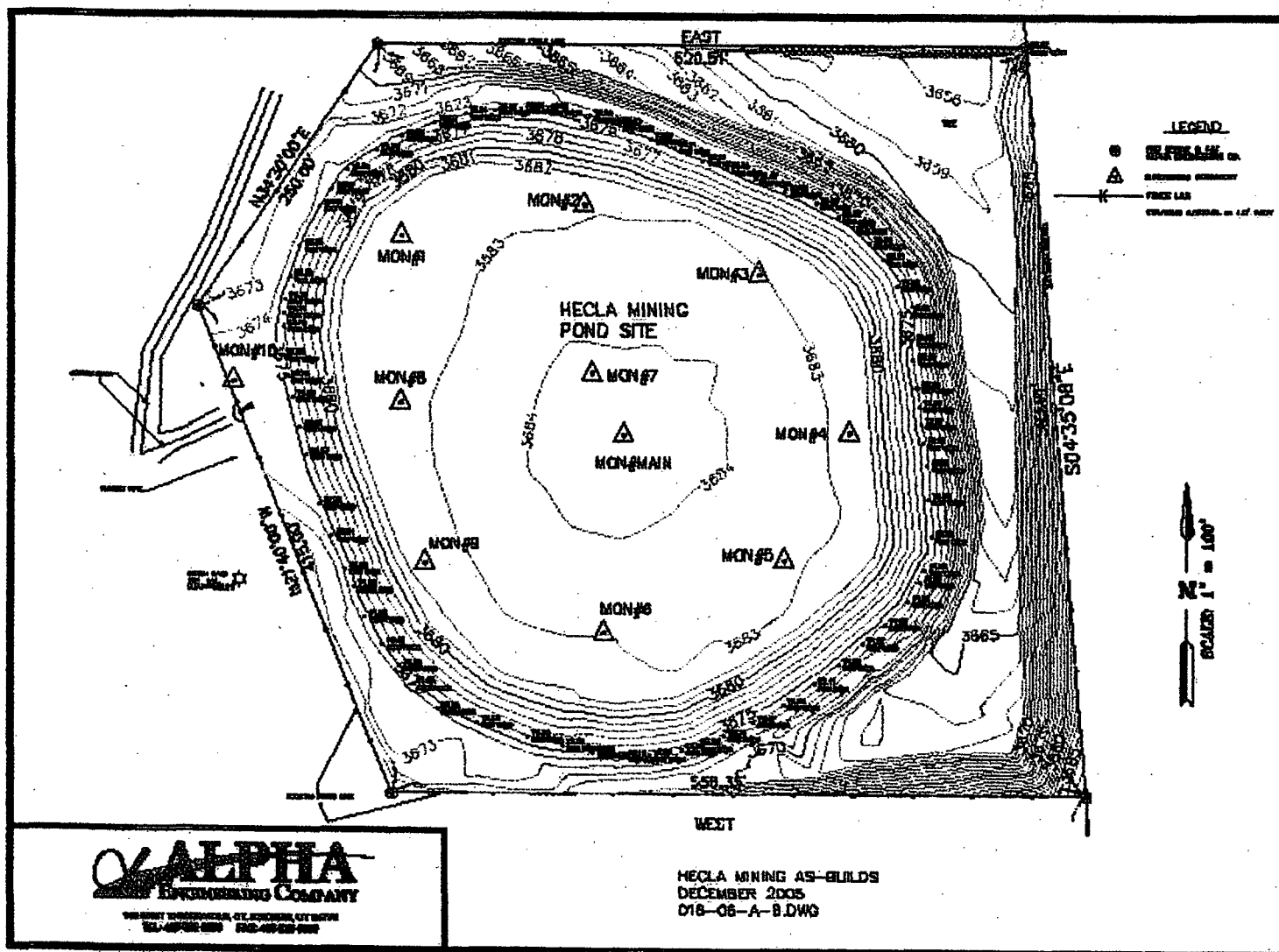


Apex Pond 2 - Settlement Monument Elevations



Apex Pond 2 - Settlement Monument Elevations







ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

**HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: DECEMBER 29, 2006)**

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.35	10130.75	3685.64	Top alum. cap
#2	10146.02	10277.46	3685.79	Top alum. cap
#3	10092.32	10417.34	3686.08	Top alum. cap
#4	9966.67	10489.50	3685.73	Top alum. cap
#5	9865.68	10437.08	3686.48	Top alum. cap
#6	9807.82	10293.18	3686.29	Top alum. cap
#7	10013.32	10283.65	3687.06	Top alum. cap
#8	9989.92	10130.34	3685.81	Top alum. cap
#9	9862.81	10149.31	3685.64	Top alum. cap
#10	10006.02	9997.82	3678.03	Top alum. cap
#11	9964.24	10309.03	3684.60	Top alum. cap



ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

**HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: SEPTEMBER 21, 2006)**

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.36	10130.70	3685.65	Top alum. cap
#2	10146.00	10277.46	3685.80	Top alum. cap
#3	10092.32	10417.34	3686.10	Top alum. cap
#4	9966.67	10489.50	3685.75	Top alum. cap
#5	9865.67	10437.07	3686.49	Top alum. cap
#6	9807.82	10293.16	3686.29	Top alum. cap
#7	10013.32	10283.64	3687.10	Top alum. cap
#8	9989.91	10130.34	3685.81	Top alum. cap
#9	9862.81	10149.31	3685.65	Top alum. cap
#10	10006.02	9997.80	3678.02	Top alum. cap
#11	9964.23	10309.03	3684.59	Top alum. cap

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 1 31-07	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III (Completed February 2006)							
Phase I - Drain Ex	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB	6,000	8,000		242,882	0	242,882	
Phase III - Regrad	337,000	342,050		504,742	0	504,742	
Field Indirect Cost	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Phases I through III	715,400	655,018	0	1,227,393	0	1,227,393	
Long Term Monitoring (through FY 2010)							
Site Inspections			177	1,763	2,922	4,685	
Settlement Monitoring			0	4,050	6,075	10,125	
Consultant Support:							
Annual Geotechnical Engineer Inspections			0	2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2007, 2009 and 2010
Site Conditions Review - MEI			0	3,161			
Site Conditions Review - SVL Analytical			0	891			
Maintenance:							
Erosion Repair Allowance			0	0	7,500	7,500	
Overseeding Allowance			0	0	9,920	9,920	
Hecla Project Management Costs:							
Labor			0	2,066	8,109	10,175	
Travel expenses			0	0	1,312	1,312	
Long Term Monitoring	0	0	177	14,426	73,938	84,312	
Final Closure	715,400	655,018	177	1,241,819	73,938	1,311,705	

Fw: Apex Monthly Report - January 2007
Eric Johnson to: Amy Swanson, Donna Jackson

02/27/2007 08:44 AM

----- Forwarded by Eric Johnson/ENF/R8/USEPA/US on 02/27/2007 08:44 AM -----



Paul Glader
<pglader@hecla-mining.com>

02/26/2007 05:09 PM

To Eric Johnson/ENF/R8/USEPA/US@EPA
cc

Subject Apex Monthly Report - January 2007



Apex Pond 2 - progress rpt 33 complete, january 2007.pdf